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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/719,338	01/17/2001	James Westphal	1313/1E290-US2	7143

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Darby & Darby
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New York, NY 10022-7513

EXAMINER

ANDERSON, CATHARINE L

ART UNIT	PAPER NUMBER
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3761

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/719,338

Applicant(s)

WESTPHAL ET AL.

Examiner

C. Lynne Anderson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 5-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koczab (5,879,344) in view of Young et al. (5,217,445).

Koczab discloses all aspects of the claimed invention with the exception of a binder resin in the acquisition zone. Koczab discloses a unitary absorbent structure, as shown in figure 3, comprising an upper fibrous layer having a liquid acquisition zone 2 and a liquid distribution zone 3, as shown in figure 4. The structure further comprises a lower fibrous liquid storage layer 12 in fluid communication with the distribution zone 3. The storage layer 12 comprises superabsorbent polymer particles, as disclosed in column 6, line 63. A containment layer 11 surrounds the storage layer 12 and is sealed to at least one edge of the upper fibrous layer, as shown in figure 4. Koczab discloses in column 3, line 66, the liquid acquisition zone 2 comprises polyester fibers, but remains silent as to the presence of a binder resin.

Young discloses an upper fibrous acquisition zone comprising thermoplastic polymers, as described in column 4, lines 34-38, and a binder resin, as described in column 4, lines 27-30. The binder resin provides the acquisition zone with an increased physical integrity which improves performance, as disclosed in column 4, lines 30-34.

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It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the acquisition zone of Koczab with a binder resin, as taught by Young, to provide increased physical integrity to the acquisition zone.

With respect to claim 2, Koczab discloses the upper fibrous layer is airlaid, as disclosed in column 4, line 8. The acquisition zone 2 has a lower density than the distribution zone 3, as disclosed in column 4, lines 25-27 and 52-55.

With respect to claim 5, Koczab discloses the containment layer 11 is sealed to the distribution zone 3, as disclosed in column 5, lines 41-43.

With respect to claim 6, Koczab discloses the containment layer 11 is sealed to the storage layer 12, as disclosed in column 5, lines 1-2.

With respect to claims 7 and 8, Koczab discloses all aspects of the claimed invention but remains silent as to the composition of the containment layer 11. The containment layer 11 functions as the liquid-impermeable backsheet of the absorbent article disclosed by Koczab. It is well-known in the art to construct a liquid-impermeable backsheet of a thermoplastic film, such as polyethylene or polypropylene, because these materials offer suitable liquid barrier properties. It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the containment layer 11 of Koczab from a thermoplastic film to provide suitable liquid barrier properties.

Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koczab (5,879,344) in view of Young et al. (5,217,445), and further in view of Hammons et al. (H1657).

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Koczab, as modified by Young, discloses all aspects of the claimed invention but remains silent as to the composition of the storage layer 12.

Hammons discloses a unitary absorbent structure comprising a lower fibrous liquid storage structure 24, as shown in figure 1. The storage layer 24 comprises an airfelt layer mixed with superabsorbent polymer particles, as disclosed in column 8, lines 49-57. The airfelt layer has a smaller pore size than the acquisition layer 22, which allows the storage structure 24 to suction liquids from the acquisition layer, as disclosed in column 8, lines 35-43.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the storage layer of Koczab from an airlaid layer, as taught by Hammons, to allow the storage structure to suction liquids from the acquisition layer.

With respect to claim 9, airfelt comprises, by definition, a plurality of bonded fibers, and therefore the airfelt layer of Hammons is lightly bonded.

Response to Arguments

Applicant's arguments with respect to claims 1-2 and 5-8 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments with respect to Yang (5,476,459) have been found persuasive.

Applicant's arguments with respect to Koczab (5,879,344) have been considered but are not persuasive.

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In response to the applicant's argument that basis weight and density are not directly proportional measurements, it is noted that basis weight and density are related by the equation,

$$\text{Basis Weight (1/Thickness)} = \text{Density}$$

Therefore, as the basis weight for any given thickness increases, the density increases, and thus basis weight and density are directly proportional.

Koczab discloses the acquisition zone has a basis weight of 10-30 g/m², and the distribution zone has a basis weight of 20-60 g/m². Koczab further discloses in column 4, lines 38-40, that the distribution zone has a thickness greater than that of the acquisition zone, and shows in the figures the distribution zone being twice the thickness of the acquisition zone. Therefore, given the range of basis weights for the zones and their relative thickness, it can be determined that the acquisition zone has both a lower basis weight and a lower density than the distribution zone.

In response to the applicant's argument that Koczab fails to disclose sealing of the containment layer by the outer layer since Koczab generically teaches the securing of the outer layer to an absorbent pad, it is noted that the outer layer is shown in figures 4 and 6 as being in direct contact with the storage layer, and therefore will be sealed to the storage layer.

In response to the applicant's argument that Koczab fails to disclose a containment layer, it is noted that the impervious backsheet layer of Koczab functions to contain absorbed liquid within the storage layer, and therefore is fully capable of functioning as a containment layer.

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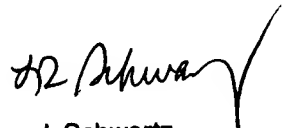
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (571) 272-4932. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Schwartz can be reached on (571) 272-4390. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CWA
cla
February 18, 2005


Larry I. Schwartz
Supervisory Patent Examiner
Group 3700